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HAROLD LEGGETT, PH D
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No

Activity No PER20080001
Agency Interest No 32610

Mr Blaine Dinger
Director, Environmental, Safety & Regulatory
Mariner Energy, Inc
2000 W Sam Houston Pkwy South, Suite 2000
Houston, TX 77042-3622

RE Permit, South Pass Block 24 Field W1 Production Facility, Mariner Energy Resources Inc
Venice, Plaquemines Parish, Louisiana

Dear Mr Dinger

This is to inform you that the permit modification request for the above referenced facility has been approved under LAC 33 III 501. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis data sheets, and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Also enclosed is a document entitled "General Information". Please be advised that this document contains a summary of facility level information contained in LDEQ's TEMPO database and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr David Ferrand, Environmental Assistance Division at (225) 219 3247 or email your changes to facupdate@la.gov.

The permit number cited below and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2008

Permit No 2240-00129 07

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary
CSN kmt

**AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

South Pass Block 24 Field W1 Production Facility

Agency Interest No 32610

Mariner Energy Resources Inc

Venice, Plaquemines Parish, Louisiana

I BACKGROUND

Mariner Energy Resources Inc, South Pass Block 24 Field W1 Production Facility, an existing natural gas and condensate crude oil production facility, began operation in 1993. The South Pass Block 24 Field W1 Production Facility currently operates under Permit No 2240-00129-06, issued November 20, 2007.

II ORIGIN

A permit application and Emission Inventory Questionnaire (EIQ) dated June 4, 2008 were received requesting a permit.

III DESCRIPTION

The South Pass Block 24 Field W1 Production Facility is a natural gas and condensate crude oil production facility. These liquids are recovered from various wells and sent via pipeline to the facility for processing. All production is routed through the surge tank for initial separation which continues through 1 series of separators. Natural gas from the separators is routed to a series of natural gas compressors. The separated liquids are sent to the respective storage tanks. Crude oil/condensate leaves the facility by pipeline.

Further separation of gas and liquids is performed via the heater treater. Prior to pipeline transport, compressed gas is sent through the glycol dehydration system for removal of entrained water. Dehydrated gas is then sent to the gas lift system or sales pipeline. The dehydration unit still column vent is controlled by a condenser.

Two natural gas-fired generators supply power to the facility. Two other generators, one fueled by diesel, are at the quarters facility. Vents from the heater treater, tanks, glycol dehydrator still column condenser, and the glycol pump flash separator will be piped to a vapor recovery system. In the event of a compressor shutdown or other emergency upsets, the excess gas is routed to a continuous burn combustion flare for safe discharge to the atmosphere. Fugitive emissions are incorporated in this permit. All controllers and pumps used onsite are powered by compressor air.

With this modification, Mariner Energy Resources, Inc proposes the following:

- 1 Correct the maximum operable horsepower on two generators (DAN-9000 & DAN-9010)
- 2 Place a CAP (CAP-GEN) on potential operating hours on two generators (DAN-9000 & DAN-9010) limiting them to 15,330 hours per year
- 3 Increase glycol dehydration unit throughput and update regulations

AIR PERMIT BRIEFING SHEET
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South Pass Block 24 Field W1 Production Facility
Agency Interest No 32610
Mariner Energy Resources Inc
Venice, Plaquemines Parish, Louisiana

Estimated emissions from this facility in tons per year are as follows

Pollutant	Before	After	Change
PM ₁₀	0 39	0 42	+0 03
SO ₂	0 26	0 26	-
NO _X	94 35	98 54	+4 19
CO	62 16	67 22	+5 06
VOC*	29 70	30 18	+0 48

*VOC speciation in tons per year

LAC 33 III Chapter 51 Toxic Air Pollutants TAP's	Emissions in Tons per year
n-Hexane	0 829
2,2,4-Trimethylpentane	0 002
Formaldehyde	7 856
Acetaldehyde	1 237
Xylene	0 053
Benzene	0 300
Toluene	0 180
Ethyl benzene	0 013
Total TAP's	10 470
Other VOC's	19 710
Total VOC	30 18

IV TYPE OF REVIEW

This permit was reviewed for compliance with Louisiana Air Quality Regulations National Emission Standards for Hazardous Air Pollutants (NESHAP) does apply [40 CFR 63 Subpart HH] New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) do not apply

This facility is a minor source of LAC 33 III Chapter 51 Toxic Air Pollutants (TAPs)

**AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

South Pass Block 24 Field W1 Production Facility

**Agency Interest No 32610
Mariner Energy Resources Inc
Venice, Plaquemines Parish, Louisiana**

V PUBLIC NOTICE

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date> and in <newspaper name> on <date>. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>. [There were no comments received during the public notice period]

VI EFFECTS ON AMBIENT AIR

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS LDEQ did not require the applicant to model emissions

Dispersion Model(s) Used None

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Ambient Air Quality Standard (NAAQS)
-	-	-	-
-	-	-	-

VII GENERAL CONDITION XVII ACTIVITIES

Work Activity	Schedule	VOC Emissions (tpy)
Collection of Samples	8 per month	0 025
Combustion Engine Shutdown & Maintenance	24 per year	0 075
Pump Preparation	4 per year	0 013
Pipeline Preparation	100 sections per year	0 050
Vessel Preparation	1 per year	0 075
Tank Cleaning for Inspection/Service	1 per year	0 075
Filter Replacement	8 per month	0 013
Instrument Mechanical Work	52 per year	0 013
Shop Work	1 per year	0 050

VIII INSIGNIFICANT ACTIVITIES

ID No	Description	Citation
n/a		

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- I This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33 III 501 If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority
- II The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations Violation of the terms and conditions of the permit constitutes a violation of these regulations
- III The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit The synopsis is based on the application and Emission Inventory Questionnaire dated June 4, 2008
- IV This permit shall become invalid, for the sources not constructed, if
 - A Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or,
 - B If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more

The administrative authority may extend this time period upon a satisfactory showing that an extension is justified

This provision does not apply to the time period between construction of the approved phases of a phased construction project However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date
- V The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels These reports shall continue to be submitted until such time as construction is certified as being complete Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- VI The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.
- VII Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33 III 913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
 - A A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33 I Chapter 39.
 - B A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- C A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter
 - 1 Report by June 30 to cover January through March
 - 2 Report by September 30 to cover April through June
 - 3 Report by December 31 to cover July through September
 - 4 Report by March 31 to cover October through December
 - D Each report submitted in accordance with this condition shall contain the following information
 - 1 Description of noncomplying emission(s),
 - 2 Cause of noncompliance,
 - 3 Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance,
 - 4 Steps taken by the permittee to reduce and eliminate the noncomplying emissions, and
 - 5 Steps taken by the permittee to prevent recurrences of the noncomplying emissions
 - E Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33 I Chapter 39, LAC 33 III Chapter 9, and LAC 33 III 5107
- XII Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to
- A Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept,
 - B Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act,
 - C Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit, and
 - D Sample or monitor for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- XIII If samples are taken under Section XII D above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.
- XIV The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.
- XV The permittee shall comply with the reporting requirements specified under LAC 33 III 919 as well as notification requirements specified under LAC 33 III 927.
- XVI In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services in accordance with LAC 33 I Chapter 19 Facility Name and Ownership/Operator Changes Process.
- XVII Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
 - 1 Generally be less than 5 TPY
 - 2 Be less than the minimum emission rate (MER)
 - 3 Be scheduled daily, weekly, monthly, etc., or
 - 4 Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]
- XVIII Provisions of the permit may be appealed to the secretary in writing pursuant to La. R.S. 30:2024(A) within 30 days from notice of the permit action. A request may be made to the secretary to suspend those provisions of the permit specifically appealed. The permit remains in effect to the extent that the secretary or assistant secretary does not elect to suspend the appealed provisions as requested or, at his discretion, other permit provisions as well. Construction cannot proceed, except as specifically approved by the secretary or

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

assistant secretary, until a final decision has been rendered on the appeal A request for hearing must be sent to the Office of the Secretary A request for hearing must be sent to the following

Attention Office of the Secretary, Legal Services Division
La. Dept of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

- XIX For Part 70 sources, certain Part 70 general conditions may duplicate or conflict with state general conditions To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions

General Information

AI ID 32610 South Pass Block 24 Field W1 Production Facility
Activity Number PER20080001
Permit Number 2240-00129-07
Air - Minor (Synthetic) Modification

Also Known As		Name	ID	User Group	Start Date
2240-00129		South Pass Block 24 Field W1 Production Facility		CDS Number	06-15-1999
LAG33AA431		LPDES #		LPDES Permit #	03-11-2006
		Mariner Energy Resources Inc		Multimedia	03-01-2006
Physical Location				Main FAX	7139545555
				Main Phone	7139545588
Mailing Address		2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	29° 5' 17" 11 hundredths latitude 89° 11' 5" 96 hundredths longitude	Coordinate Method	NAD83
Location of Front Gate				Interpolation	
Related People		Name	Mailing Address	Phone (Type)	Relationship
		Blaine Dinger	2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	BDINGER@MARINE	Responsible Official for
		Blaine Dinger	2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	7139545555 (WF)	Responsible Official for
		Blaine Dinger	2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	7139545588 (WP)	Responsible Official for
		Blaine Dinger	2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	BDINGER@MARINE	Emission Inventory Contact for
		Blaine Dinger	2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	7139545588 (WP)	Emission Inventory Contact for
		Blaine Dinger	2000 W Sam Houston Pkwy S Ste 2000 Houston TX 77042	7139545555 (WF)	Emission Inventory Contact for
		Larry Fontenot	4023 Ambassador Caffery Pkwy Ste 200 Lafayette LA 70503	33725562620 (WP)	Responsible Official for
		Larry Fontenot	4023 Ambassador Caffery Pkwy Ste 200 Lafayette LA 70503	33725562620 (WP)	Water Permit Contact For
Related Organizations		Name	Address	Phone (Type)	Relationship
		Mariner Energy Resources Inc	One Brar Lake Plaza Houston TX 77042	3038121607 (WP)	Emission Inventory Billing Party
		Mariner Energy Resources Inc	One Brar Lake Plaza Houston TX 77042	3038121607 (WP)	Air Billing Party for
		Mariner Energy Resources Inc	One Brar Lake Plaza Houston TX 77042	3038121607 (WP)	Water Billing Party for
		Mariner Energy Resources Inc	One Brar Lake Plaza Houston TX 77042	3038121607 (WP)	Operates
		Mariner Energy Resources Inc	One Brar Lake Plaza Houston TX 77042	3038121607 (WP)	Owns

Note This report entitled General Information contains a summary of facility level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document you may contact Mr. David Ferrand Environmental Assistance Division at (225) 219-0775 or email your changes to facupdate@la.gov

AI ID 32610 South Pass Block 24 Field W1 Production Facility
Activity Number PER20080001
Permit Number 2240-00129-07
Air Minor (Synthetic) Modification

INVENTORIES**Subject Item Inventory**

ID	Description	Tank Volume	Max Operating Rate	Normal Operating Rate	Contents	Operating Time
Natural Gas Generator Engines (Alternate)						
Operating Hours 15.330 hr/yr						
EQT0033	DAN 9000 Generator Engine No 1 Caterpillar G 398 TA NG (catalytic converter)		412 horsepower	412 horsepower		(None Specified)
EQT0034	DAN 9010 Generator Engine No 2 Caterpillar G 398 TA NG (catalytic converter)		412 horsepower	412 horsepower		(None Specified)
South Pass Block 24 Field W1 Prod Facility						
EQT0021	ABH 1600 Sump Tank	500 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0022	ABH 1700 Good Oil Holding Tank No 3	5000 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0023	ABJ 1100 Bad Oil Tank	825 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0024	ABJ 1600 Produced Water Skimmer	90 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0025	ABJ 5250 Good Oil Holding Tank No 1	100 bbl	547500 bbl/yr	547500 bbl/yr		8760 hr/yr (All Year)
EQT0026	ABJ 5350 Divert Oil Storage Tank	13335 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0027	ABJ 5400 Produced Water Holding Tank No 1	225 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0028	ABJ-5410 Produced Water Holding Tank No 2	225 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0029	ABJ 5610 Compressor Barge Sump Tank	485 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0030	CBA 1000 Compressor Engine No 1 Waukesha 7044GSi (catalytic converter)		1400 horsepower	1400 horsepower		8760 hr/yr (All Year)
EQT0031	CBA 2000 Compressor Engine No 2 Waukesha 7044GSi (catalytic converter)		1400 horsepower	1400 horsepower		8760 hr/yr (All Year)
EQT0032	CBA 3000 Compressor Engine No 3 Waukesha 7044GSi (catalytic converter)		1400 horsepower	1400 horsepower		8760 hr/yr (All Year)
EQT0035	DAN 9020 Generator Engine Quarters Waukesha F1197 G NG (catalytic converter)		138 horsepower	138 horsepower		8760 hr/yr (All Year)
EQT0036	DAN 9030 Diesel Generator Engine Quarters		138 horsepower	138 horsepower		720 hr/yr (All Year)
EQT0037	EAW 1000 Heater Treater Burner Stack		75 MM BTU/hr	75 MM BTU/hr		8760 hr/yr (All Year)
EQT0038	EAW 1400 Glycol Regenerator Burner Stack		25 MM BTU/hr	25 MM BTU/hr		8760 hr/yr (All Year)
EQT0039	MAF-4700 Glycol Dehydrator Still Column Vent/Condenser		25 MM ft ³ /day	25 MM ft ³ /day		8760 hr/yr (All Year)
EQT0040	MBD-4105 Surge Tank (Sludge Catcher)	60 bbl	547500 bbl/yr	547500 bbl/yr		8760 hr/yr (All Year)
EQT0041	MBJ 1300 Good Oil Holding Tank No 2	400 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0042	MBJ 5150 Produced Water Disposal Tank	60 bbl	5475 bbl/yr	5475 bbl/yr		8760 hr/yr (All Year)
EQT0043	ZFL 1000 Continuous Burn Combustion Flare		18 MM scf/yr	18 MM scf/yr		8760 hr/yr (All Year)
EQT0044	VRS Vapor Recovery System (Electric)					8760 hr/yr (All Year)
FUG0002	FUG 1000 Fugitive Emissions					8760 hr/yr (All Year)
Stack Information						
ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)
Natural Gas Generator Engines (Alternate)						
Operating Hours 15.330 hr/yr						
EQT0033	DAN 9000 Generator Engine No 1 Caterpillar G 398 TA NG (catalytic converter)	36.3	2180	12	10	1100
EQT0034	DAN 9010 Generator Engine No 2 Caterpillar G 398 TA NG (catalytic converter)	36.3	2180	12	10	1100

INVENTORIES

All ID 32610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER2008001
 Permit Number 2240 00129-07
 Air Minor (Synthetic) Modification

Stack Information

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Natural Gas Generator Engines (Alternate Operating Hours 15 330 hr/yr) converter)							
South Pass Block 24 Field W1 Prod Facility							
EQT0021	ABH 1600 Sump Tank	03	07	25		10	80
EQT0022	ABH 1700 Good Oil Holding Tank No 3	03	07	25		60	80
EQT0023	ABJ 1100 Bad Oil Tank	03	07	25		40	80
EQT0024	ABJ 1600 Produced Water Skimmer	03	07	25		10	80
EQT0025	ABJ 5250 Good Oil Holding Tank No 1	03	07	25		12	80
EQT0026	ABJ 5550 Divert Oil Storage Tank	03	07	25		37.5	80
EQT0027	ABJ 5400 Produced Water Holding Tank No 1	03	07	25		12	80
EQT0028	ABJ 5410 Produced Water Holding Tank No 2	03	07	25		12	80
EQT0029	ABJ 5610 Compressor Barge Sump Tank	03	07	25		35	80
EQT0030	CBA 1000 Compressor Engine No 1 Waukesha 7044GSI (catalytic converter)	45.2	2713		18	12	1100
EQT0031	CBA 2000 Compressor Engine No 2 Waukesha 7044GSI (catalytic converter)	45.2	2713		18	12	1100
EQT0032	CBA 3000 Compressor Engine No 3 Waukesha 7044GSI (catalytic converter)	45.2	2713		18	12	1100
EQT0035	DAN 9020 Generator Engine Quarters Waukesha F1197 G NG (catalytic converter)	10	602	12		10	1100
EQT0036	Diesel Generator Engine Quarters	9.1	547	12		10	800
EQT0037	EAW 1000 Heater Treater Burner Stack	4.33	557	10		25	400
EQT0038	EAW 1400 Glycol Regenerator Burner Stack	2.17	283	10		25	350
EQT0039	MAF-4700 Glycol dehydrator Still Column Vent/Condenser			5		15	100
EQT0040	MBD-4105 Surge Tank (Slug Catcher)	2.43	715	25		27.5	80
EQT0041	MBJ 1300 Good Oil Holding Tank No 2	03	07	25		27.5	80
EQT0042	MBJ 5150 Produced Water Disposal Tank	03	07	25		10	80
EQT0043	ZFL 1000 Continuous Burn Combustion Flare	2.53	13.21	33		30	1600

Relationships

ID	Description	Relationship	ID	Description
EQT0021	ABH 1600 Sump Tank	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0022	ABH 1700 Good Oil Holding Tank No 3	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0023	ABJ 1100 Bad Oil Tank	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0024	ABJ 1600 Produced Water Skimmer	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0025	ABJ 5250 Good Oil Holding Tank No 1	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0026	ABJ 5550 Divert Oil Storage Tank	Vents to	EQT0044	VRS Vapor Recovery System (Electric)

INVENTORIES

All ID 32610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129-07
 Air Minor (Synthetic) Modification

Relationships

ID	Description	Relationship	ID	Description
EQT0027	ABJ 5400 Produced Water Holding Tank No 1	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0028	ABJ 5410 Produced Water Holding Tank No 2	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0029	ABJ 5610 Compressor Barge Sump Tank	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0039	MAF-4700 Glycol dehydrator Still Column Vent/Condenser	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0040	MBD-4105 Surge Tank (Slug Catcher)	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0041	MBJ 1300 Good Oil Holding Tank No 2	Vents to	EQT0044	VRS Vapor Recovery System (Electric)
EQT0042	MBJ 5150 Produced Water Disposal Tank	Vents to	EQT0044	VRS Vapor Recovery System (Electric)

Subject Item Groups

ID	Group Type	Group Description
PCSP002	Process Group	CAP GEN Natural Gas Generator Engines (Alternate Operating Hours 15 330 hr/yr)
UNFG001	Unit or Facility Wide	Facility South Pass Block 24 Field W1 Production Facility

Group Membership

ID	Description	Member of Groups
EQT0033	DAN 9000 Generator Engine No 1 Caterpillar G 398 TA NG (catalytic converter)	PCS0000000002
EQT0034	DAN 9010 Generator Engine No 2 Caterpillar G 398 TA NG (catalytic converter)	PCS0000000002

NOTE The UNF group relationship is not printed in this table Every subject item is a member of the UNF group

Annual Maintenance Fee

Fee Number	Air Contaminant Source	Multplier	Units Of Measure
0040	Crude Oil and Natural Gas Production (Less than 100 T/Yr Source)	1	

SIC Codes

1311	Crude petroleum and natural gas	A132610	
1311	Crude petroleum and natural gas	UNF001	

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID 322610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129-07
 Air Minor (Synthetic) Modification

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Natural Gas Generator Engines (Alternate Operating Hours 15 330 hr/yr)															
EQT 0033 DAN 9000	3.94		3.26			0.03			0.003			0.09			0.09
EQT 0034 DAN 9010	3.94		3.26			0.03			0.003			0.09			0.09
South Pass Block 24 Field W1 Prod Facility															
EQT 0021 ABH-1650												0.07	<0.01		
EQT 0022 ABH-1700												0.24	-		
EQT 0023 ABJ 1100												0.12	0.001		
EQT 0024 ABJ-1600												0.07	<0.001		
EQT 0025 ABJ-5350	-											0.01	0.02		
EQT 0026 ABJ-5350												0.75	<0.01		
EQT 0027 ABJ-5400												0.10	<0.01		
EQT 0028 ABJ 5410												0.10	<0.01		
EQT 0029 ABJ 5610												0.10	<0.01		
EQT 0030 CBA 1000	2.56	2.56	11.22	5.25	5.25	22.98	<0.01	0.004	0.01	0.01	0.04	1.24	1.24	5.43	
EQT 0031 CBA 2000	2.56	2.56	11.22	5.25	5.25	22.98	<0.01	0.004	0.01	0.01	0.04	1.24	1.24	5.43	
EQT 0032 CBA 3000	2.56	2.56	11.22	5.25	5.25	22.98	<0.01	0.004	0.01	0.01	0.04	1.24	1.24	5.43	
EQT 0035 DAN 9020	0.61	0.61	2.67	0.61	0.61	2.67	0.01	0.04	<0.01	0.01	0.03	0.03	0.03	0.03	0.14
EQT 0036 DAN 9030	0.92	0.92	0.33	4.28	4.28	1.54	0.30	0.30	0.11	0.28	0.10	0.34	0.34	0.12	
EQT 0037 EAW 1000	0.06	0.06	0.26	0.07	0.07	0.31	0.01	0.01	0.02	<0.01	0.01	0.01	0.01	0.01	0.02
EQT 0038 EAW 1400	0.02	0.02	0.09	0.03	0.03	0.11	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01
EQT 0039 MAF-4700												0.16	0.16	0.70	
EQT 0040 MBD-4105												4.64	4.64	0.02	
EQT 0041 MBJ 1300												0.10	<0.01		
EQT 0042 MBJ 5150												0.06	<0.01		

EMISSION RATES FOR CRITERIA POLLUTANTS

AID 32610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129-07
 Air Minor (Synthetic) Modification

CO			NOx			PM10			SO2			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Avg lb/hr	Max lb/hr	Tons/Year
South Pass Block 24 Field W1 Prod Facility														
EQT 0043 2FL 1000	0.01	0.01	0.04	<0.01	<0.01	0.01			<0.01			<0.01	<0.01	0.01
FUG 0002 EUG-1000												2.78	2.78	12.17
PCS 0002 CAP-GEN	6.89		30.17	5.70		24.97	0.05		0.22	0.005		0.02	0.16	0.70

Note Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**AI ID 32610 South Pass Block 24 Field W1 Production Facility****Activity Number PER20080001****Permit Number 2240-00129-07****Air Minor (Synthetic) Modification**

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0021 ABH-1600	Benzene		0 001	< 0 01
	n-Hexane		0 005	< 0 01
EQT 0022 ABH-1700	Benzene		0 001	< 0 01
	n Hexane		0 005	< 0 01
EQT 0023 ABJ-1100	Benzene		0 001	< 0 01
	n-Hexane		0 005	< 0 01
EQT 0024 ABJ-1600	Benzene		0 001	< 0 01
	n-Hexane		0 005	< 0 01
EQT 0025 ABJ-5250	Benzene		0 104	0 001
	Ethyl benzene		0 002	< 0 01
	Toluene		0 018	< 0 01
	Xylene (mixed isomers)		0 001	< 0 01
	n-Hexane		0 513	0 002
EQT 0026 ABJ-5350	Benzene		0 001	< 0 01
	n-Hexane		0 005	< 0 01
EQT 0027 ABJ-5400	Benzene		0 001	< 0 01
	n Hexane		0 005	< 0 01
EQT 0028 ABJ-5410	Benzene		0 001	< 0 01
	n Hexane		0 005	< 0 01
EQT 0029 ABJ-5610	Benzene		0 001	< 0 01
	n Hexane		0 005	< 0 01
EQT 0030 CBA-1000	Acetaldehyde	0 088	0 088	0 385
	Benzene	0 005	0 005	0 022
	Ethyl benzene	< 0 01	< 0 01	0 002
	Formaldehyde	0 554	0 554	2 427
	Toluene	0 004	0 004	0 018
	Xylene (mixed isomers)	0 002	0 002	0 009
	n Hexane	0 012	0 012	0 053
EQT 0031 CBA-2000	Acetaldehyde	0 088	0 088	0 385
	Benzene	0 005	0 005	0 022
	Ethyl benzene	< 0 01	< 0 01	0 002
	Formaldehyde	0 554	0 554	2 427
	Toluene	0 004	0 004	0 018
	Xylene (mixed isomers)	0 002	0 002	0 009

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID 32610 South Pass Block 24 Field W1 Production Facility

Activity Number PER20080001

Permit Number 2240-00129-07

Air Minor (Synthetic) Modification

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0031 CBA-2000	n Hexane	0 012	0 012	0 053
EQT 0032 CBA-3000	Acetaldehyde	0 088	0 088	0 385
	Benzene	0 005	0 005	0 022
	Ethyl benzene	< 0 01	< 0 01	0 002
	Formaldehyde	0 554	0 554	2 427
	Toluene	0 004	0 004	0 018
	Xylene (mixed isomers)	0 002	0 002	0 009
	n Hexane	0 012	0 012	0 053
EQT 0033 DAN-9000	Acetaldehyde		0 009	
	Benzene		0 005	
	Ethyl benzene		0 000	
	Formaldehyde		0 063	
	Toluene		0 002	
	Xylene (mixed isomers)		0 001	
EQT 0034 DAN-9010	Acetaldehyde		0 009	
	Benzene		0 005	
	Ethyl benzene		0 000	
	Formaldehyde		0 063	
	Toluene		0 002	
	Xylene (mixed isomers)		0 001	
EQT 0035 DAN-9020	Acetaldehyde	0 003	0 003	0 013
	Benzene	0 002	0 002	0 009
	Formaldehyde	0 021	0 021	0 092
	Toluene	0 001	0 001	0 004
EQT 0036 DAN-9030	Acetaldehyde	0 001	0 001	< 0 01
	Benzene	< 0 01	0 001	< 0 01
	Formaldehyde	0 001	0 001	< 0 01
EQT 0037 EAW 1000	n-Hexane	0 001	0 001	0 004
EQT 0039 MAF-4700	2,2,4 Trimethylpentane	0 001	0 001	0 002
	Benzene	0 030	0 030	0 132
	Ethyl benzene		0 001	0 003
	Toluene	0 018	0 018	0 076
	Xylene (mixed isomers)	0 002	0 002	0 009
	n-Hexane	0 005	0 005	0 022

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AIID 32610 South Pass Block 24 Field W1 Production Facility

Activity Number PER20080001

Permit Number 2240-00129-07

Air Minor (Synthetic) Modification

Emission Pt	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EOT 0040 MBJ 4105	Benzene		0 104	0 001
	Ethyl benzene		0 002	< 0 01
	Toluene		0 018	< 0 01
	Xylene (mixed isomers)		0 001	< 0 01
	n Hexane		0 513	0 002
	Benzene		0 001	< 0 01
EQT 0041 MBJ 1100	n Hexane		0 005	< 0 01
	Benzene		0 001	< 0 01
	n Hexane		0 005	< 0 01
	Benzene		0 001	< 0 01
FUG 0042 FUG-1000	n Hexane		0 005	< 0 01
	Benzene	0 012	0 012	0 053
	Ethyl benzene	0 001	0 001	0 003
	Toluene	0 007	0 007	0 031
	Xylene (mixed isomers)	0 002	0 002	0 009
	n Hexane	0 146	0 146	0 640
PCS 0002 CAP CEN	Acetaldehyde	0 016		0 069
	Benzene	0 009		0 038
	Ethyl benzene	0 000		0 001
	Formaldehyde	0 110		0 483
	Toluene	0 003		0 0150
	Xylene (mixed isomers)	0 002		0 008
UNF 0001 Fac N	2,2,4 Trimethylpentane			0 002
	Acetaldehyde			1 237
	Benzene			0 300
	Ethyl benzene			0 013
	Formaldehyde			7 856
	Toluene			0 180
	Xylene (mixed isomers)			0 053
	n Hexane			0 829

Note Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

All ID 32610 **South Pass Block 24 Field W1 Production Facility**
Activity Number PER20080001
Permit Number 2240-00129-07
Air - Minor (Synthetic) Modification

Group PCS0002 Natural Gas Generator Engines (Alternate Operating Hours 15,330 hr/yr)**PCS0002 Natural Gas Generator Engines (Alternate Operating Hours 15,330 hr/yr)****Group Members EQT0033 EQT0034**

- 1 [LAC 33 III 1101 B] Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis None specified
- 2 [LAC 33 III 1311 C] Opacity <= 20 percent except emissions may have an average opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis Six minute average
- 3 [LAC 33 III 501 C 6] Operating time <= 15,330 hr/yr
 Which Months Phases Statistical Basis Annual total
- 4 [LAC 33 III 501 C 6] Operating time Operating time recordkeeping by electronic or hard copy annually Keep records of the total hours of operation

EQT0030 CBA 1000 Compressor Engine No 1 Waukesha 7044GSL (catalytic converter)

- 5 [LAC 33 III 1101 B] Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis None specified
- 6 [LAC 33 III 1311 C] Opacity <= 20 percent except emissions may have an average opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis Six minute average
- 7 [LAC 33 III 501 C 6] Conduct a performance/emissions test Due within 180 days after initial startup (or restart up after modification) or within 60 days after achieving normal production rate or end of the shutdown period whichever is earliest The stack test's purpose is to demonstrate compliance with the emission limits of this permit Repeat the test after each major engine overhaul Test methods and procedures shall be in accordance with New Source Performance Standards 40 CFR 60 Appendix A Method 7E Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division Engineering Services As required by LAC 33 III 913 provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits
 Equipment/operational data recordkeeping by electronic or hard copy annually Recorded parameters are NOx CO and O2 concentrations in the stack gas obtained during annual testing
- 8 [LAC 33 III 501 C 6] Stack gas concentration Carbon monoxide monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of CO in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample
 Which Months All Year Statistical Basis None specified
- 9 [LAC 33 III 501 C 6]

SPECIFIC REQUIREMENTS

AID 32610 - South Pass Block 24 Field W1 Production Facility

Activity Number PER20080001
 Permit Number 2240-00129 07
 Air Minor (Synthetic) Modification

EQT0030 CBA 1000 Compressor Engine No 1 Waukesha 7044GSI (catalytic converter)

- 10 [LAC 33 III 501 C 6] Stack gas concentration Nitrogen oxides monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of NOx in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample
 Which Months All Year Statistical Basis None spec fied
- 11 [LAC 33 III 501 C 6] Stack gas concentration Oxygen monitored by portable analyzer annually (twelve months after the stack test or previous annual test, plus or minus 30 days) Maintain concentrations of O₂ in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample
 Which Months All Year Statistical Basis None specified
- 12 [LAC 33 III 501 C 6] Submit notification Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment Environmental Technology Division Engineering Services to provide the opportunity to conduct a pretest meeting and observe the emission testing
 Submit report Due within 60 days after performing emissions test Submit emissions test results to the Office of Environmental Assessment Environmental Technology Division Engineering Services
- 13 [LAC 33 III 501 C 6]

EQT0031 CBA 2000 Compressor Engine No 2 Waukesha 7044GSI (catalytic converter)

- 14 [LAC 33 III 1101 B] Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis None specified
- 15 [LAC 33 III 1311 C] Opacity <= 20 percent except emissions may have an average opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis Six minute average
- 16 [LAC 33 III 501 C 6] Conduct a performance/emissions test Due within 180 days after initial startup (or restart up after modification) or within 60 days after achieving normal production rate or end of the shutdown period whichever is earliest The stack test's purpose is to demonstrate compliance with the emission limits of this permit Repeat the test after each major engine overhaul Test methods and procedures shall be in accordance with New Source Performance Standards 40 CFR 60 Appendix A Method 7E Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment Environmental Technology Division, Engineering Services As required by LAC 33 III 913 provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits
- Equipment/operational data recordkeeping by electronic or hard copy annually Recorded parameters are NO_x CO and O₂ concentrations in the stack gas obtained during annual testing
- Stack gas concentration Carbon monoxide monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of CO in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample
 Which Months All Year Statistical Basis None specified
- 17 [LAC 33 III 501 C 6]
- 18 [LAC 33 III 501 C 6]

SPECIFIC REQUIREMENTS

AI ID 322610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129 07
 Air Minor (Synthetic) Modification

EQT0031 CBA 2000 Compressor Engine No 2 Waukesha 7044GSI (catalytic converter)

19 [LAC 33 III 501 C 6] Stack gas concentration Nitrogen oxides monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of NOx in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample

Which Months All Year Statistical Basis None specified

Stack gas concentration Oxygen monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of O2 in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample

Which Months All Year Statistical Basis None specified

Submit notification Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment Environmental Technology Division Engineering Services to provide the opportunity to conduct a pretest meeting and observe the emission testing Submit report Due within 60 days after performance/emissions test Submit emissions test results to the Office of Environmental Assessment Environmental Technology Division Engineering Services

EQT0032 CBA 3000 Compressor Engine No 3 Waukesha 7044GSI (catalytic converter)

Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)

Which Months All Year Statistical Basis None specified

Opacity <= 20 percent except emissions may have an average opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)

Which Months All Year Statistical Basis Six minute average

Conduct a performance/emissions test Due within 180 days after initial startup (or restart up after modification) or within 60 days after achieving normal production rate or end of the shutdown period whichever is earliest The stack test's purpose is to demonstrate compliance with the emission limits of this permit Repeat the test after each major engine overhaul Test methods and procedures shall be in accordance with New Source Performance Standards 40 CFR 60 Appendix A Method 7E Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division Engineering Services As required by LAC 33 III 913 provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits

Equipment/operational data recordkeeping by electronic or hard copy annually Recorded parameters are NOx CO and O2 concentrations in the stack gas obtained during annual testing

Stack gas concentration Carbon monoxide monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of CO in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample

Which Months All Year Statistical Basis None specified

SPECIFIC REQUIREMENTS

All ID 32610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129 07
 Air Minor (Synthetic) Modification

EQT0032 CBA 3000 Compressor Engine No 3 Waukesha 7044GSI (catalytic converter)

28	[LAC 33 III 501 C 6]	Stack gas concentration Nitrogen oxides monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of NOx in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample
29	[LAC 33 III 501 C 6]	Which Months All Year Statistical Basis None specified Stack gas concentration Oxygen monitored by portable analyzer annually (twelve months after the stack test or previous annual test plus or minus 30 days) Maintain concentrations of O2 in the same range as during the initial stack test Calibrate portable analyzers before each test using a known reference gas sample
30	[LAC 33 III 501 C 6]	Which Months All Year Statistical Basis None specified Submit notification Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment Environmental Technology Division, Engineering Services to provide the opportunity to conduct a pretest meeting and observe the emission testing
31	[LAC 33 III 501 C 6]	Submit report Due within 60 days after performance/emissions test Submit emissions test results to the Office of Environmental Assessment Environmental Technology Division Engineering Services

EQT0035 DAN 9020 Generator Engine Quarters Waukesha F1197 G NG (catalytic converter)

32	[LAC 33 III 1101 B]	Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel) Which Months All Year Statistical Basis None specified Opacity <= 20 percent except emissions may have an average opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
33	[LAC 33 III 1311 C]	Which Months All Year Statistical Basis Six minute average

EQT0036 DAN 9030 Diesel Generator Engine Quarters

34	[LAC 33 III 1101 B]	Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel) Which Months All Year Statistical Basis None specified Opacity <= 20 percent except emissions may have an average opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
35	[LAC 33 III 1311 C]	Which Months All Year Statistical Basis Six minute average

EQT0037 EAW 1000 - Heater Treater Burner Stack

36	[LAC 33 III 1101 B]	Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lancing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel) Which Months All Year Statistical Basis None specified
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SPECIFIC REQUIREMENTS

AJ ID 322610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129-07
 Air Minor (Synthetic) Modification

EQT0037 EAW 1000 Heater Treater Burner Stack

37 [LAC 33 III 1313 C]
 Total suspended particulate <= 0 6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis None specified

EQT0038 EAW 1400 Glycol Regenerator Burner Stack

38 [LAC 33 III 1101 B]
 Opacity <= 20 percent except during the cleaning of a fire box or building of a new fire soot blowing or lanceing charging of an incinerator equipment changes ash removal or rapping of precipitators which may have an opacity in excess of 20 percent for not more than one six minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis None specified
 Total suspended particulate <= 0 6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel)
 Which Months All Year Statistical Basis None specified

EQT0039 MAF-4700 Glycol dehydrator Still Column Vent/Condenser

40 [40 CFR 63 774(d)]
 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency Keep records of the information specified in 40 CFR 63 774(d)(1) or (d)(1)(ii) as applicable Subpart HH [40 CFR 63 774(d)]
 Final exhaust Temperature < 110 F
 Which Months All Year Statistical Basis Annual average
 VOC Total >= 85 % reduction using a control device Demonstrate percent reduction using the methods found in LAC 33 III 2116 D
 Which Months All Year Statistical Basis None specified
 Determine compliance with LAC 33 III 2116 B using the methods in LAC 33 III 2116 D 1 5 as appropriate
 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event Keep records of the information specified in LAC 33 III 2116 F 1
 Temperature recordkeeping by electronic or hard copy at the regulation's specified frequency Keep records of the information specified in LAC 33 III 2116 F 3 a and b

EQT0043 ZFL 1000 Continuous Burn Combustion Flare

46 [LAC 33 III 1105]
 Opacity <= 20 percent except for a combined total of six hours in any 10 consecutive day period for burning in connection with pressure valve releases for control over process upsets
 Which Months All Year Statistical Basis None specified
 Submit notification Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets Notify in accordance with LAC 33 I 3923 Notification is required only if the upset cannot be controlled in six hours
 Submit report Due in writing to SPOC within seven calendar days after startup or shutdown if flaring was not the result of failure to maintain or repair equipment Submit report if requesting exemption from the provisions of LAC 33 III 1105 Explain the conditions and duration of the startup or shutdown and list the steps necessary to remedy prevent and limit the excess emissions Minimize flaring and ensure that no ambient air quality standards are jeopardized
 Develop a corrective action plan for re lighting the flare Plan must be kept readily available for immediate implementation in the event the flare needs to be re lit

SPECIFIC REQUIREMENTS

AI ID 322610 South Pass Block 24 Field W1 Production Facility
 Activity Number PER20080001
 Permit Number 2240-00129-07
 Air Minor (Synthetic) Modification

EQT0043 ZFL 1000 Continuous Burn Combustion Flare

- 50 [LAC 33 III 501 C 6] Flare gas Heat content > 300 BTU/scf to ensure destruction of emissions to the flare stack
 Which Months All Year Statistical Basis None specified
- 51 [LAC 33 III 501 C 6] Flare gas Heat content monitored by gas analysis annually to insure the heat content is above 300 BTU/scf
 Which Months All Year Statistical Basis None specified
- 52 [LAC 33 III 501 C 6] Flare gas Heat content recordkeeping by electronic or hard copy annually
 Which Months All Year Statistical Basis None specified
- 53 [LAC 33 III 501 C 6] Presence of a flame monitored by visual inspection/determination daily
 Which Months All Year Statistical Basis None specified
- 54 [LAC 33 III 501 C 6] Presence of a flame recordkeeping by electronic or hard copy daily

FUG0002 FUG 1000 Fugitive Emissions

- 55 [LAC 33 III 2(11)] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 15 psia or greater at handling conditions with mechanical seals or other equivalent equipment

UNF0001 South Pass Block 24 Field W1 Prod Facility

- 56 [40 CFR 63] All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A as delineated in Table 2 of 40 CFR 63 Subpart HH
 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33 III 111 or intensify an existing traffic hazard condition are prohibited
- 57 [LAC 33 III 1(03)] Outdoor burning of waste material or other combustible material is prohibited
- 58 [LAC 33 III 1(09 B] Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited
- 59 [LAC 33 III 1303 B] Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions Good housekeeping shall include but not be limited to the practices listed in LAC 33 III 2113 A 1 §
 Failure to pay the prescribed application fee or annual fee as provided herein within 90 days after the due date will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including but not limited to revocation or suspension of the applicable permit license registration or variance
- 60 [LAC 33 III 2(13 A] Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency Due within 30 days after requested by the administrative authority
- 61 [LAC 33 III 2(9] During an Air Pollution Alert Air Pollution Warning or Air Pollution Emergency make the standby plan available on the premises to any person authorized by the department to enforce these regulations